

**Notice of Allowability**

Application No.

10/801,403

Applicant(s)

ABE ET AL

Examiner

Art Unit

Dismerly E. Mercedes

2651

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amend. filed 7/26/2005.
2. ☒ The allowed claim(s) is/are 1 and 3-9.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### DETAILED ACTION

1. Applicant's arguments see pages 10-11 of Applicant's Remarks, filed 7/26/2005, with respect to claims 5,8-9 have been fully considered and are persuasive. The 102(b) rejection of claims 5,8 and 103(a) rejection of claim 9 have been withdrawn.

### *Reasons for Allowance*

2. The following is an examiner's statement of reasons for allowance:

Indep. Claim 1 is allowable over Prior Art of Record, since the cited references taken alone or in combination, in particular Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6,510,014 B2); Codilian et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), do not teach or suggest: *a variable shock detection slice value setting part that sets a variable shock detection slice value, which is a threshold for said shock sensor signal, based on a position error signal representative of the relative position of said disk medium in a radial direction thereof from the center of a target track of said disk medium; and wherein said variable shock detection slice value setting part sets said variable shock detection slice value in such a manner that the smaller the absolute value of said position error signal the larger said variable shock detection slice value becomes.*

Indep. Claim 4 is allowable over is allowable over Prior Art of Record, since the cited references taken alone or in combination, in particular Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6, 510,014 B2); Codilian et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), do not teach or suggest *a variable shock detection slice value setting part that sets a variable shock detection slice value which is a threshold for said shock sensor signal based on a position error signal representative of the relative position of said disk medium in a radial direction thereof from the center of a target track of said disk medium; a shock sensor signal correction part that outputs, as a new shock sensor signal, a signal by removing noise generated in synchronization with writing from said shock sensor signal.*

Indep. Claim 5 is allowable over is allowable over Prior Art of Record, since the cited references taken alone or in combination, in particular Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6, 510,014 B2); Codilian et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), do not teach or suggest *a shock sensor signal correction part that outputs a corrected shock sensor signal by removing noise generated in synchronization with writing from said shock sensor signal', and a shock determining part that outputs a shock detection signal when said corrected shock sensor signal exceeds a prescribed shock detection slice value.*

Indep. Claim 7 is allowable over is allowable over Prior Art of Record, since the cited references taken alone or in combination, in particular Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6, 510,014 B2); Codilian et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), do not teach or suggest *a variable shock detection slice value setting part that sets a variable shock detection slice value, which is a threshold for said shock sensor signal based on a position error signal representative of the relative position of said disk medium in a radial direction thereof from the center of a target track of said disk medium; and wherein said shock detection device outputs said shock detection signal when a shock applied to said disk medium satisfies said prescribed condition; and wherein said disk drive further comprises a write-protection circuit that stops the timing of writing from said control part when said shock detection signal is input thereto from said shock detection device.*

Indep. Claims 8-9 are allowable over Prior Art of Record, since the cited references taken alone or in combination, in particular Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6, 510,014 B2); Codilian et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), do not teach or suggest: *setting a variable shock detection slice value, which is a threshold for said shock sensor signal, based on a position error signal representative of the relative position of said disk medium in a radial direction thereof from the center of a target track of said disk medium; and generating a new shock sensor signal by removing noise generated in synchronization with writing from said shock sensor signal', and outputting a shock detection signal when said new shock sensor signal exceeds said variable shock detection slice value.*

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Serrano et al. (US 6,226,140 B1); Kikuta et al. (US B6, 510,014 B2); Codillan et al. (US 6,735,033); Gong et al. (US 6,683,737 B2), Carlson et al. (US 6,018,431); Pan et al. (US 6,178,058 B1); Guo et al. (US 6,744,577 B1); Bi et al. (US 2003/0103286 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Dismery E Mercedes

Examiner

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DM



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**SUPERVISORY PATENT EXAMINER**  
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